UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/463,271	01/24/2000	ANDRE KAUP	P00.0103	. 6121

29177	7590	01/24/2005		EXAMINER

BELL, BOYD & LLOYD, LLC
P. O. BOX 1135
CHICAGO, IL 60690-1135

CARTER, AARON W

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 January 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>11-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>11-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 January 2000</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on January 3, 2005 has been entered.

Response to Arguments

2.   Applicant's arguments with respect to claim 11 have been considered but are moot in

view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN

6,115,717 to Mehrotra et al. ("Mehrotra") (already of record) in view of USPN 5,987,459 to

Swanson et al. ("Swanson") (already of record).

        As to claim 11, Mehrotra discloses a method for storing search features (column 2, lines

3-4, wherein metadata corresponds to search features) of an image sequence (column 3, lines 57-

64), said method comprising the steps of:

        Providing that said image sequence include individual objects, said individual objects

being at least one of audio objects and video objects (column 3, lines 57-65, wherein each image

sequence contains individual objects in the form of individual images which corresponds to

individual objects and which corresponds to video objects);

        determining said search features from said image sequence (column 3, lines 20-24 and

column 3, line 65 – column 4, line 2, wherein open space metadata corresponds to a search

feature and for each image all the open space metadata is computed for all the open spaces

present in each image corresponding to features); and

        storing said features together with said image sequence wherein separate search feature

sets are provided for each individual object (column 3, lines 24-26 and lines 57-60, wherein each

image has its own separate search feature set in the form of open space metadata and is stored

along each image in the image sequence).

        Mehrotra does not disclose expressly that the individual object, in this case each image, is

coded according to one of an MPEG standard and an ITU standard.

Swanson discloses storing search features that there are disadvantages of attaching search features to a compressed image file (18) either as a prefix (20) or appended (20) to the file (Figure 1 and column 3, lines 19-27). He goes on to discuss several advantages of storing the search features directly into the image (26, Figure 1 and column 3, lines 28-39) in the image is preferably coded using the JPEG algorithm (column 10, lines 24-25, wherein JPEG corresponds to an ITU standard).

Mehrotra & Swanson are combinable because they are from the same art of image processing and specifically image storage and retrieval.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to code the image disclosed by Mehrotra using an ITU standard, in this case the JPEG standard.

The suggestion/motivation for doing so would have been to provide the advantage of keeping search features in close proximity of the image sequence for increased retrieval time and by storing search features in the image sequence storage space required could be reduced (Swanson, column 1, lines 40-47).

Therefore, it would have been obvious to combine Mehrotra with Swanson to obtain the invention as specified in claim 11.

As to claim 12, the combination of Mehrotra and Swanson discloses the method as claimed in claim 11, wherein said search features are at least one of audio data and video data of said of said image (Mehrotra, column 5, lines 9-12 and Fig. 5 wherein metadata contains video data of the image).

As to claim 13, the combination of Mehrotra and Swanson discloses the method as claimed in claim 11, wherein said search features comprise a reference to an image within said image sequence for assisting in accessing said image within said image sequence (Mehrotra, Fig. 5, wherein each image is provided an image-ID or inherently a frame number).

As to claim 19, the combination of Mehrotra and Swanson discloses the method as claimed in claim 11, wherein separate search features for several objects that are contained in said image sequence according to image coding standards are respectively stored together with said image sequence (Mehrotra, column 6, lines 60-62).

As to claim 20, the combination of Mehrotra and Swanson discloses the method as claimed in claim 11, wherein said search features can be unambiguously identified by a predeterminable start code (Mehrotra, column 12, lines 20-22 and Fig. 9).

As to claims 14-16, please refer to the rejection made for claim 11 above.

As to claim 17, Mehrotra and Swanson combined provide us with the method of claim 16, comprising of storing search features in an image sequence. Swanson discuss the addition of the search features as a prefix ("file header", column 3, lines 56-62) to a file created preferably according to the JPEG compression standard (column 4, lines 24-25), but neglects to explicitly mention the search features can be stored as a prefix to an intra-image created according to the MPEG standard. The Examiner takes Official Notice that the intra-image according to MPEG

standard is well known in the art as a still image contained in the MPEG file, as well as the JPEG

standard being a well known coding technique in the field of individual images. Therefore it

would have been obvious to one of ordinary skill in the art to create a MPEG file of the

audiovisual sequence discussed by Mehrotra and to store search feature as prefix to an intra-

image using technique disclosed by Swanson. This would provide the advantage of reduced

storage space.

As to claim 18, the combination of Mehrotra and Swanson discloses a method according

to claim 17, wherein each image scene of said image sequence is stored in a database (Mehrotra,

Fig. 1, element 18 and column 6, lines 60-62).

Conclusion

5.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Aaron W Carter whose telephone number is (703) 306-4060 or at

(571) 272-7445 after March 31, 2005. The examiner can normally be reached on 7am - 3:30 am
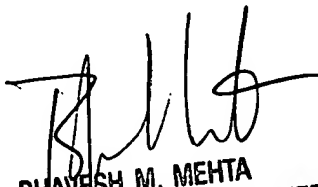
(Mon. - Fri.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bhavesh Mehta can be reached on (703) 308-5246. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

awc

BHAVESH M. MEHTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600